

**Notice of Allowability**

Application No.

10/783,530

Examiner

Amir Alavi

Applicant(s)

RILEY ET AL.

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to The election of the restricted claims received 28 October 2004.
2. ☒ The allowed claim(s) is/are 54-69 (now renumbered as 1-16).
3. ☒ The drawings filed on 24 April 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>20040618</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                               | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

## **EXAMINER'S AMENDMENT**

- An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
- The application has been amended as follows: On page 1, of the specification, line 5, after, "10/132,059", please insert, "now Patent No. 6,763,149".
- This application is in condition for allowance except for the presence of claims 19-20, 47-53 and 70-72 to a non-elected without traverse. Accordingly, claims 19-20, 47-53 and 70-72 have been cancelled.

## REASONS FOR ALLOWANCE

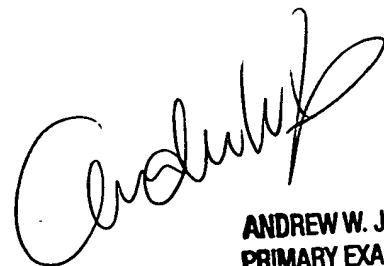
- The following is an examiner's statement of reasons for allowance: The present invention is directed to a multi-channel imaging system for generating an ensemble of images from an object for each field of view of the object, wherein each image in the ensemble contains information from substantially only one source. Independent claims 54-55 and 59 identify the uniquely distinct feature, "for wherein a multi-channel detector is disposed to receive plurality of images produced by an imaging lens, the multi-channel detector producing a plurality of output signals, such that a separate output signal is produced for each of said light beams and correcting the output signals for any misalignment between the images in ensemble on the multi-channel detector to within sub-pixel resolution and reducing contributions from the output signals of other channels to the output signal in each channel"; Independent claim 65 identifies the uniquely distinct feature, "for an imaging lens that focuses each of plurality of light beams on at least one pixilated detector, producing a respective image corresponding to a different one of the plurality of light beams, each image being one of ensemble of images, said at least one pixilated detector providing an output signal for each

respective image and correcting the output signals for any misalignment between the respective images on said at least one pixilated detector and substantially reducing crosstalk between the output signals". The closest prior art, Mitchell et al. (USPN 6,330,361 B1), disclose wherein an improved optical correlator using a coherent light beam employs a method of adaptive alignment, wherein a test pattern modulates an input spatial light modulator and the modulated beam propagates through passive transforming optical elements to a filter spatial light modulator, which is simultaneously modulated with an independently transformed frequency domain reference; while Rogers et al. (USPN 5,351,311), disclose neural network for detection and correction of local boundary misalignment between images, either singularly or in combination, fail to anticipate or render the above underlined limitation obvious.

- Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Contact Information

- Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amir Alavi whose telephone number is 571-272-7386.
- The examiner can normally be reached on Mon-Thu.. 8:00 am thru 6:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Bhavesh Mehta can be reached on 571-272-7453.
- The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.
- For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**ANDREW W. JOHNS**  
**PRIMARY EXAMINER**